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ABSTRACT

This conference report summarizes major speeches, including such topics as "Teaching Effective Writing Skills to Dialectically Different Students" and "New Approaches for Teaching Students Standard English." The four objectives of this landmark conference were as follows: (1) to assist black and other minority students in the acquisition of necessary language skills, (2) to provide language skills that will facilitate a wide range of economic, political, and social opportunities, (3) to teach language with respect for the student's own language and cultural values, and (4) to mobilize the black community in support of research and the establishment of a data base to influence public policy. Recommendations for explicit goals and objectives follow each speech. A substantial appendix, designed for use in developing vocabulary teaching materials, considers context clues, prefixes, suffixes and combining forms, compound words, connotation, and denotation. (MAI)

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STRATEGIES FOR SOLVING PROBLEMS OF LANGUAGE ACQUISITION: A BLUEPRINT FOR ACTION

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ALBERT H. BERRIAN
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ISE is a nonprofit educational technical assistance organization specializing in Faculty and Curriculum Development, Planning and Management Systems and Research and Evaluation. The organization focuses on minority institutions of higher education and institutions with significant concentrations of minority students. ISE was incorporated in 1965.

This document is the product of a cooperative workshop activity between ISE and the Urban Education Division of Harcourt, Brace and Jovanovich. Albert Berrian of ISE and Marianna Davis of Benedict College were assisted in the development of this report by the conference attendees, who critiqued the draft report. A list of the attendees appears at the end of the report.

An appendix is included as an illustration of the kind of research that is sometimes useful for alleviating language difficulties. This inclusion, which was prepared in 1956, was not intended as an approach to the solution of language difficulties in an in-depth way, but as an approach to increasing the vocabulary of ROTC cadets at Southern University in Baton Rouge. It was used along with instructions in test taking and in the development of study skills at a time when the standardized test scores of the cadets were so low as to threaten the continuance of the ROTC program. The effort was successful and the program that was in question is still intact.

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FOREWORD

It is abundantly clear from the literature that there is nothing new about the existence of diagnostic aids to help instructors determine whether students can hear vowels, digraphs and consonant blends, can blend words visually as well as phonetically, and have skills in word synthesis. Gates' *List of Spelling Difficulties in 3,876 Words* has been used to assess phonic spelling knowledge since the late 1930's. The use of dictation to improve phonic and related skills was common in the 1940's. Roswell-Chall were busy in word analysis and auditory blending during the 1950's and 1960's, and by the 1960's diagnostic reading strategies were extremely common. Black professionals became active in these areas and socio-linguistics during the 1960's. Missing, with reference to meeting the needs of students who were not hearers and speakers of standard English, was a taxonomy of interferences. Obviously, therefore, instructors of students from sub-cultural circumstances, were without a knowledge of the interferences or the wherewithal to counteract them. This was equally true of black instructors, whites and others—with so few black instructors knowledgeable about the reading process as to render them (as a class) ineffective as teachers of verbal skills. What with the poor training of English teachers in terms of their being knowledgeable about either the reading process or phonemic analysis, this situation remains unchanged.

The need for productive research from Blacks prepared in speech and hearing therapy, English and general linguistics cannot be overstated. Once the philosophical and socio-political statements have been made, the research tasks must be carried out. Their nature is made explicit in that section of the ensuing report entitled What Remains to be Accomplished. Assuming acceptance of this section, instructors must be retrained, administrators (and instructors) made conscious of proper record keeping, performance-based teaching and learning strategies, assessment and feedback procedures, and curriculum management. Here is where organizations such as ISE come in. The job before us is overwhelming. Time is running out for black and other minority instructors and students; and expressions of mature commitment from all quarters are long over-due.

Albert H. Berrian

A BLUE PRINT FOR ACTION A Synopsis of the Conference on Strategies for Solving Problems of Language Acquisition. A Conference Synopsis

Conference Objectives

The landmark conference, Strategies for Solving Problems of Language Acquisition, was held in Atlanta on February 25-26, 1977. The conference was convened by the Washington-based Institute for Services to Education (ISE) and the Division of Urban Education at Harcourt, Brace and Jovanovich, acting jointly. Twenty-seven persons attended the conference, representing the publishing world, the world of research and development, the black policy making world, and those of general education, linguistics and communication skills and concerned public citizenry. The purposes of the conference as consensually derived, were as follows:

1. To assist black and other non-mainstream students in the acquisition of the language skills necessary for survival in the United States
2. To provide language skills that will facilitate a wide range of economic, political and social opportunities.
3. To teach language in such a way as not to eradicate the students' rich language tradition and cultural values
4. To mobilize the black community in support of research and the establishment of a data base to be utilized to influence public policy.

Introductory Statement

The Harcourt, Brace, Jovanovich position was put forth by Dan Collins, President of that company's Division of Urban Education. It was that the division's purpose in co-sponsoring the conference with ISE was to "have black specialists in the United States in the field of linguistics, language arts, and speech and communication (skills) meet in a quiet intimate session to discuss their feelings, ideas about, and solution to the problem of language". The problem was defined as the need for assurances that a child entering school for the first time not be held by the teacher or his school system for language usage which, to the child, is alien to that to which he has been exposed. Stated another way, children must not be made to feel guilty or ashamed over the language usage they bring to the classroom. "If a child comes to a classroom in the United States speaking non-standard English (be it black dialect,

Swedish, German, Chinese or Russian), it is the duty of the teacher and the school system to accept that child's language without acrimony, recriminations or intimidation. Moreover, the school system should provide the child, during his course of instruction and graduation, with a common, generally adopted public language ability, so that he will function well in the society and not be handicapped because of an inability to communicate in the common public language used in commerce, industry and other types of social, political and cultural communications necessary for survival in the American system".

Dan Collins hurled a challenge to higher education specialists in his introductory remarks, exhorting them to provide black professional leadership in helping to direct the development of curriculum materials to be used nationally in language arts, mathematics and other fields, but first and foremost in language arts. The Division of Urban Education of Harcourt, Brace and Jovanovich, he explained, was ready to decide whether or not the time had come to develop a curriculum which would assure bi-dialectal abilities by the time of a child's finishing his elementary and secondary education. His company would make its decision, however, based upon support found in the conference and an expressed willingness on the part of black specialists to assist in the development of a comprehensive curriculum. Such a curriculum (hopefully to be duplicated in mathematics and other fields) should function in two ways: firstly, as a basis for teacher training along child-centered lines; secondly, as a way of producing a larger number of students who, upon entry into higher education, could benefit from general curricular offerings without having to spend a considerable portion of their energy doing so-called remedial work.

The Conference Format and Process

The ISE staff (composed of the Vice President, who is in foreign languages and linguistics and the heads of the English and reading components of the Company's Division of Faculty and Curriculum Development), worked with the ISE president, Elias Blake, Dan Collins, and Marianna Davis of Benedict College in the setting up of a simple format that would get at the conference objectives. The number of presentations were held to four, covering a two-day period, so that the conferees could engage in adequate discussion. Since the issues to be discussed were as much in the area of education and public policy as in the programmatic area, the subjects for presentation were varied. The Atlanta Reporting Company was invited to record and transcribe the conference so that a synopsis could be prepared from the proceedings.

Presentors on the first day included Orlando Taylor, Chairman of Howard University's Department of Speech, and Darnell Williams, a

linguist in the Department of English at Jackson State University. Ben Colbert of ETS and Angela Bickley, Vice President of Academic Affairs at West Virginia State University, respectively, were asked to critique the speeches prior to audience discussion. Second-day presentors included Marianna Davis, Chairperson of Benedict College's Division of Information and Cultural Services, and Kenneth Johnson, linguist at the University of California at Berkeley. ISE's Albert Berrian and Thelma Curl, Chairperson of Norfolk State College's English Department, were respectively, asked to provide the critiques.

Taylor's speech, "Assessment and Resolutions of Oral Language Problems of Minority Students: A Point of View", was, along with Collins' introductory remarks, to set the conference tone. This speech, by design, touched on policy issues, established a philosophical position for total conferee consideration, and contained social-political, as well as programmatic implications. The speech was followed by one that stressed the application of linguistic principles. Darnell Williams' "Teaching Effective Writing Skills to Dialectically Different Students". The Darnell speech was, in addition, experientially based. The two speeches achieved their purposes of giving balance to the deliberations by appealing to the diversified interests of a heterogeneous group.

This approach was repeated, somewhat, on the second day, although in reverse order. The application came first, albeit in a planning and assessment context. Marianna Davis' descriptive presentation, "The Benedict College Program," came first. Albert Berrian critiqued it. This was followed by Kenneth Johnson's "New Approaches for Teaching Students Standard English", in which shades of policy issues came forth. Taylor and Johnson kept up a lively by-play, after which Thelma Curl provided a critique. The conference then went into a brief wrap-up session, chaired by Davis and Berrian and terminated with a quick reading of a press release, in which conference goals were re-stated, followed by a discussion of future plans. In brief, future plans called for a synopsis, its general review by the conferees, and the subsequent drafting of a proposal, based on which funds will, hopefully, be procured for carrying out agreed-upon commitments and tasks.

Summary of Taylor's Speech and Recommendations

Implicit in Taylor's presentation is that black linguistic behaviors, though subject to geographic differences, are reflective of a coherent, viable subculture. Black speech, Taylor emphasizes, conforms to the same social and cultural variables that all speech conforms to. It is influenced by socio-cultural factors; for example, age and sexual differences. Black speech exhibits regional characteristics, despite its

southern base; class variables are a factor. Black students, Taylor insists, do not have language problems different in framework from those that certain other groups have, e.g., white Appalachian students, Spanish-speaking students. The problems are simply represented differently vis-a-vis phonology, word usage and syntax. The universal features of linguistic behavior across ethnic and racial groups are stressed and held important in the face of social attitudes which place black students over here and all others over there.

Passing mention is made of the tendency to define black children according to the cultural deviance or pathological model. Assumed here is that there is a normative model that sets up criteria of behavior against which that of groups outside of the social norm can be measured. Taylor does not carry his rejection of this model into the usual plea for cultural pluralism, but rather gets into the need for a national policy on language. Such a policy should be accompanied by an understanding of what Standard English is, of what Southern Standard English is, of what Black Standard English is. There are no commonly agreed-upon definitions—no proper contrasts to make between where students are and where one is trying to take them.

From the black perspective, Taylor reasons, the effective black communicator is one who can control a variety of levels in the black community and have the proper method of communication outside his community. This is essentially an argument for cultural pluralism. It also supports Dan Collins' argument above that teachers should respect a child's language while, at the same time, providing him, over time, with a common, generally adopted public language ability.

Special attention is paid to teacher attitudes, especially those which result in forcing students to pattern negative attitudes toward themselves. Poor teacher attitudes and expectations, growing out of generalized racial concepts on the one hand and the oral language usage of black children on the other, are said to result in low self-concepts on the part of black students. Taylor's concerns are continuously focused against communications issues, though they range over the reality of being a black student in schools where one is disciplined to reflect the attitudes and belief systems about them of teachers, parents and administrators.

Tests that measure language development, personality, achievement, intelligence, aptitudes for the various professions, etc., are also discussed against their invalidity with respect to the language presuppositions they make with reference to black students. Not only are the presuppositions seen as incorrect, but a social factor comes up in that there is a belief that, in order to be logical, in order for cognitive development to be normal, it can only be expressed through the use of certain linguistic structures. If tests are not seen in proper perspective and if language problems are not viewed in universal terms, what one gets, Taylor surmises, is resegregation at the college level. This is reflected in the siphoning off of black students into special programs and classes that bear stigmatic labels.

Taylor actually begins his presentation in a discipline context (A certain rearrangement was used in the summary). The point is made that oral language is the basis of all language and that the problems experienced by black students

in reading and writing are rooted in their oral language tradition. Further, in talking about reading a book or writing a composition, one deals with a narrow and formal sense of what language behavior is. It is in the more formal stylized use of language that black students experience difficulties. There are few difficulties with language in the more informal sense, in which non-verbal language (uses of body, face, space) plays a part. Cultural differences in language usage and low test scores (partly the result of these differences) are also interpreted incorrectly to mean that black students are deficient cognitively.

As aforementioned, the Taylor speech establishes philosophical positions and highlights certain policy issues. It was well received by the analyst and other conferees and provoked no controversy. It was apparent that the Collins comments and Taylor speech together represented acceptable parameters within which to continue discussion and reflected the black perspective on the problems posed by language behavior.

There were explicit and implicit recommendations in Taylor's presentation, as follows:

1) That enlightened public policy, research and faculty and curriculum development are essential ingredients in an appropriate strategy for solving the problem of language acquisition
2) That operational definitions of what is meant by the Standard Englishes (including Black Standard English) are in order. In this connection, specifications are in order as to the proper contrasts to make between where a student is and where one is trying to take him
3) That a body of material be prepared that will give students an accurate view of their language behavior and the kinds of linguistic goals we are talking about here
4) That there needs to be black input into the formulation of a national language policy, since there are educational goals (not just black goals) for communication skills.

Summary of Darnell Williams' Speech and Recommendations

Darnell Williams' speech served to reinforce Taylor's position that effective teaching takes place in a positive environment and that negative teacher attitudes toward students result in their wholesale failure. In point of fact, Williams' appeal for positive approaches to students is made to black teachers as well as to those from other ethnic groups. According to Williams there have been many approaches and many textbooks concerned with expository writing which have flooded the market within the last five years. At every professional convention for composition teachers, voluminous papers are read and discussions are held concerning new techniques, devices and approaches that *must* be tried, for *these* have been proven to be the long sought after answers to a seemingly insoluble problem. Too, any observer can see long lines of

frantic, but well meaning, conventioneers waiting in front of publishers' booths to stock up on composition texts with fancy titles and covers, because "these must have the innovative reading and writing exercises" that will appeal to our radical students.

Besides the problem with teaching composition skills to mainstream students, teachers have the responsibility of teaching the same skills to students who are culturally and linguistically different. The problem of teaching these students came to the forefront during the late 1960s when the Center for Applied Linguistics was in its heyday. To many composition teachers, the Center had the answer to their problems with its belief that Standard English should be taught to the dialectically different student as a foreign or second language. After several years of experiencing failure with the second dialect theories and techniques, the teachers again began a desperate search for a solution to their problem. For the first time in the history of education in America, mainstream education leaders began to seek professional input from educators who were members of minority groups. It was eventually learned, however, that though these educators were members of minority groups, they had been influenced by the same theories set forth by the Center for Applied Linguitics as had the mainstream educators. Consequently, failure and the almost unbearable frustration which follows were again experienced by the teachers. Teachers who felt they had 'no other recourse,' adopted the attitudes of Jensen and Schockley that Blacks are genetically inferior, and began either to fail them in their courses or pass them with no instruction at all. The process of wholesale flunking or passing of the students is the worst failure of them all on the part of the instructors.

Present teaching trends and teachers attitudes not only damage students academically, but psychologically as well. There is no reason for instructors to experience any of the traditional failures in teaching dialectically different students, because every teacher has at his grasp what it takes to teach good expository writing skills to these students, i.e., make use of the students' cultural experiences in oral and written exercises, select reading materials with which the students can relate, and have positive attitudes toward language and cultural differences.

Positive attitudes toward the students' language and culture are essential when the instructor is trying to equip the students with mechanical and grammatical principals of Standard English. The failure of the second dialect technique taught us that we, as composition teachers, can no longer look upon the language and culture of minority groups as being inferior and nonfunctional. This negative attitude toward the students will break down communication between the instructor and students, thus making instruction impossible. The instructor must take the attitude that the students come into the classroom with a viable

language which serves to transmit the ideas and thoughts which have evolved from their cultural environment. He or she must never attempt to belittle or eradicate this language.

Use of the students' cultural experiences is the most important tool that the teacher has. Since the primary aim of expository writing is to teach students to organize, develop and support their ideas in written form, allowing the students to write about topics which interest them is the first step toward this goal. It has been my experience that structural problems are not insurmountable when this step is allowed. This is understandable, because the students are not writing about something that is unfamiliar to them; thus, they are more confident about what they are writing. Oftentimes, students' writings lack development and organization because they lack confidence in what they are saying. Consequently, they write as little as possible, hoping to avoid embarassing errors both in information and style.

Selection of reading materials with which students can relate serves to motivate the students to broaden their scope through reading. Since reading is usually boring to most students, it becomes even more boring to dialectically different students who are required to read essays, novels, short stories and poetry with which they cannot relate. In this day and time when accountability and relevance are the measuring stick for the success or failure of our academic programs, composition teachers are no less affected. No longer can they look upon themselves as having failed if they do not have among their reading assignments works by European and white American authors. The important factor is that the students are reading and learning the techniques of critical thinking and writing.

Once the students have experienced positiveness on the part of the teacher and have realized a sense of achievement, they are more receptive to traditional instruction. When they know that the instructor is not a proponent of the 'all must flunk syndrome,' they come into the classroom with a more positive attitude toward themselves, the teacher and the educational process in general. Teachers will find that dialectically different students can easily be taught good expository writing in Standard English if they (the teachers) will be innovative in their approach—innovative in the sense that they understand the importance of allowing one to express one's cultural experiences and read literature that is meaningful to one's cultural identity. Further, the teacher must always approach classroom instruction and counseling with positive attitudes. Instruction in standard grammatical and mechanical essentials will be more pleasant then, because the students will not be learning in a hostile environment. The instructor must function within the understanding that his job is to expand the student's language usage, not to eradicate his native language and culture. This, I repeat, is essential.

Explicit recommendations are as follows:

1. That the practice of teaching Standard English as a second or foreign language to dialectically different students be discontinued.
2. That the teaching of expository writing be accompanied with making use of students' cultural experiences in written exercises, and in the selection of reading materials with which the students can relate.

Summary of Marianna Davis' Speech and Recommendations

Marianna Davis' speech opened with a variation on a familiar theme: A child goes to school to learn how to think, how to develop his imagination, how to invent, how to be creative, and the achievement of these skills should not be determined merely by one's facility with Standard American English. Facility with Standard American English is not a mark of superior intelligence, for any language is a highly formalized system of cultural behaviors. Davis does not denigrate the need, however, to know how to use Standard American English, but only because it is the language of power and everything that goes with power.

English teachers at Benedict College decided to help their students master American public English three years ago. This resulted from their feelings of pressure over failures by the Benedict students in the GRE and other kinds of tests and their failure to impress job interviewers to an extent satisfactory to the English department and placement office. This brought the conferees back to the Collins admonition that students be taught a commonly, generally adapted public language so as to function well in the society and not be handicapped. Benedict College's AIDP proposal (for Title III funds to enable the college to develop institutional and instructional priorities) stated that its language component would be designed to provide students with the skills necessary to move through the college program and thereby obtain employment as professionals.

A revolutionary type of program was designed and implemented that permitted eleven teachers to teach three component courses in consecutive order to one specific group of thirty students. The students take no other subject but freshman English, as they are carried through oral communications, reading and writing and language usage. The three components described are of five-weeks duration each and take place over a five-day week, comprising three hours of instruction per day.

In the course in oral communications, instructions are given in voice and articulation. In addition, student experiences incorporate both public and interpersonal communication and include such activities as

interviewing, problem solving, parliamentary procedures, formal and informal discussion, oral reports and speech preparation and delivery.

The language and usage course is designed to help students become familiar with the sounds, structure and formation of words, basic sentence patterns and the finer points of American English usage. With eighty-six percent of Benedict's students coming from South Carolina and most of the others from large urban areas, students are not asked to eliminate their dialects, but rather to learn Standard Public American English in contexts which require it—in short, to have an ear for dialect differences.

The course, Reading and Writing, is designed to develop in each student appropriate skills in reading and written communication. Recognizing the strong relationship between reading and writing, the course stresses reading comprehension, vocabulary building, creative thinking, discrimination and accuracy in making judgments, and clarity and effectiveness in communicating ideas. Readings and topics for composition emphasize the students' own experiences and those of others which are relevant to them. These readings and topics are drawn from literature, history, sociology, religion, language and psychology.

All teachers work out of a common set of course objectives and use a common set of required texts. At the same time, each teacher is free to adopt supplementary books or materials. An experimental text written by Davis herself is used in the reading and writing courses. This text attempts to utilize frames and social patterns familiar to the students as a way of increasing their motivation.

The laboratories in reading, speech and writing operate daily to assist students in the language component. The laboratory directors are trained in the areas of the three complementary components described. The directors also work closely with the regular classroom teachers. All of this is supplemented by counseling and tutorial services and planned cultural and reflective experiences that should contribute to student growth into mature and responsible members of society.

The problem of teacher attitudes, discussed above, had to be dealt with. According to Davis, the problem of employing appropriately trained teachers in the language component loomed large. Those teachers already on board had to be retrained and new teachers sought who possessed the traits and skills needed to work with the Benedict College student. A variety of reports were used, even with black teachers who had graduated from Benedict, but that was before it had become an open-door institution. The U.S. Office of Education Bulletin was used that stated: "Our hypothesis is that the chief cause of low achievement of the children of alienated groups is in the fact that too many teachers and principals honestly believe that those children are educable only to an extremely limited extent. And when teachers have a

low exceptation level for their children's learning, the children seldom exceed that expectation, which is a self-fulfilling prophency".* Benedict is still working on this problem.

Three of the teachers employed in the Language Component at Benedict have the doctorate degree. One is a specialist in reading, one in speech, and one in writing. Three more holders of the doctorate are expected at this very moment—two in linguistics and one in rhetoric. There are two foreign language teachers on the staff, which is of particular interest to Al Berrian, who in addition to representing ISE at this conference, has been publicly advocating that black foreign language teachers join in the mission of upgrading general communication skills at college levels. Eight of the eleven teachers in Benedict's Language Component have had public school teaching experience, and so can understand the problem of language acquisition in continuum terms.

Evaluation in the Language Component is used both to assess needs and to determine progress. A variety of techniques and instruments are used. Objective tests—teacher-made and standardized—essay tests, research projects, oral tests, and practical tests fill this category. Grades of A, B, C, Incomplete, and F are given for each of the three courses. Says Davis, "We try very hard at the administration, to get the faculty to do away with D's and F's; but we could not get that through. They did go with the D's so we do not give D's. We give A, B, C; and rather than giving a student a D and rather than giving a student an F, we give Incompletes; and we then assist them, since an incomplete must be removed in six weeks. And I was able to get a vote through the Committee on Academic Administration where I'm quite hopeful to allow us to give the student a full semester to remove any incomplete. Now, our freshman students have another half semester to do some work in the laboratory."

In looking at the performance of students in the components during the first semester of the 1976-77 term, this year, Davis noted a statistical increase in group scores made on the following tests: the McGraw-Hill Basic Skills, a system test, and the Nelson Denny Reading Test. While Davis promotes no great emphasis on standardized test scores, she did take the view that these scores can be used as indications for improving the teaching of communications skills.

Transparencies were used to break down the McGraw Hill Basic

*There is a growing body of literature on the self-fulfilling prophecy. An interesting and comprehensive statement on this subject was prepared and read by Robert Rosenthal and Lenore Jacobson at the annual meeting of the American Psychological Association held in New York City in September 1966.

Systems by part: Writing, pre and post; Language Mechanics; Sentence Patterns; Paragraph Patterns. Although the increases were deemed insufficient to meet Benedict's institutional language goals for its graduates, increases in performance were considerable in the areas of Language Mechanics and Sentence Patterns. This was not the case with Paragraph Patterns, and this phenomenon will be studied.

Title III funds have helped Benedict's Division of Information and Culture to employ three statisticians. They do nothing but look at the test data and come up with periodic reports. The same is true of mathematics. The question of how to organize the information being gathered and distribute it to the public is under study.

A question raised by Berrian during his critique of the Davis presentation was whether Benedict could, through the approach described actually graduate students with sufficient verbal (and in this case quantitative) competence to compete for professional jobs in American society. It was explained at this point that the Benedict student takes an additional fifteen hours of English after he leaves the freshman year. These include 3 hours in advanced composition. Selections are then made from among public speaking, humanities and literature (including black literature). Finally, each student must submit a senior paper in his or her discipline that is graded both by the teacher in the discipline and an English teacher. The program has only been in existence for three years, so that there has not been an opportunity, up to this point, to draw up a report on the efficacy of the language program over the four years. Needless to say, just on the basis of the planning described and the implementation and assessment procedures already in place, the Benedict experiment is well in advance of the times.

The recommendations made are explicit enough. They include:

1) Devising a strategy for training teachers to focus on a well-defined, agreed-upon set of objectives appropriate for college freshmen in the areas of speaking, reading and writing
2) Devising a strategy for training teachers in the methods of assessing student potential and growth according to agreed-upon standards
3) Coming up with an approach to changing the thinking of students about college as four years of education to one about college as an individually designed program of study, whereby the time spent varies according to a student's reality level and other variables. (It was suggested *sotto voce* that policy makers, administrators and parents be included here.)
4) Devising an approach to changing the thinking of the college community to focus upon a wedding of those appendages from the traditional modes and those from the newer philosophical

modes of learning, so as to bring forth a vital and forceful new concept of learning for black youth engaged in language skills training.

5) Getting black leaders to assert themselves for what they know is morally right, economically feasible and socially appropriate with reference to the literacy of our students.

Summary of Ken Johnson's Speech and Recommendations

Ken Johnson decided to revise his prepared statements on New Approaches to Teaching Standard English to accommodate earlier remarks made by Orlando Taylor and Darnell Williams. This revision included having Taylor to share the speaker's station with him and inviting Williams to join in when the discussion got around to questions of applications.

Johnson's explanation of the problem is that black people (who can be defined rationally only in terms of shared cultural experiences) talk differently and that their differences in oral Anglo language interfere with their ability to read and to speak Standard English. The history of English as spoken by black people includes the past need to learn English as a lingua franca and the development of an African-influenced and simplified version of English. Pidgin, the first version of English learned, gave way to a creolized version, and so forth, but always with some African influence. As was brought out, the version of English on which Blacks exerted influence was of a non-standard British model.

Getting into the question of definitions, as suggested earlier by Taylor, Johnson points out that black speech does not have geographical boundaries—that black speech on the south side of Chicago is, for example, not very different from that in Atlanta. Many of Chicago's Blacks come from Atlanta, after which time they were isolated in the ghetto and kept in a position to perpetuate their linguistic patterns. Cultural patterns go both ways, of course, so that black speech and southern speech have marked similarities. This was said not to mean that there are not differences between southern speech and black speech—differences that Blacks can detect with considerable ease.

Johnson's definition of a dialect is a variety of a particular language that differs from other varieties in terms of its lexicon, intonation patterns, stress, grammar and phonology. Johnson does not see the differences as being great, as between Latin and Spanish, for example, nor does he see the major differences as being in terms of vocabulary. Rather, they are in terms of phonology and grammar and, to some extent, of intonation and style. Lexical differences are slight, except for words

that have different meaning; e.g., words having to do with skin color, words like *signifying, seditty, the dozens.* While one usually speaks of geographical dialects, black dialect is more cultural than geographical.

Johnson defines Standard English as that variety of English taught in schools. This varies around the country, mostly in phonology and pronunciation. The dialects of U.S. presidents are cited as examples of Standard English in its different varieties. Nixon and Ford, speakers of the language of power, Roosevelt and Kennedy, speakers of two different northeastern dialects, Johnson and Carter, the first the speaker of a near southern dialect and the second the speaker of a southern dialect. Johnson's and Carter's speech patterns come closest to black dialect. Important to note is that the presidents all differ in phonology, but not in grammar. This says to us that we must stress grammatical features with our kids, because these are consistent regardless of geography.

Johnson refers to the upper right hand quadrant of Taylor's grid as the place where one should put Standard English, or that variety of English spoken by people in power. It is clear what that is with respect to grammar. As far as stress, intonation, style and non-verbal phenomena are concerned, there is some problem here. Students will have to master these from being in an environment where they are exposed to it and where they are forced to use it in order to survive. Somewhere in the upper right hand corner is where our students must be-where formal English, as it refers to the educated, is concerned. They also need to be in that quadrant that refers to informal educated English. The other two quadrants are culturally related and, according to Johnson, unneeded.

There is a formal black English which is yet to be defined. Johnson believes that he and Taylor or some two people with their kind of background should provide the definition, Whites, he does not think can do it, because they do not hear it. Socially, Blacks tend to use this English among themselves but shift when Whites are present.

Contrary to the opinion of certain others, Johnson is certain that educated Blacks know, unconsciously, what black English is. It is creative and full of "signifying"; black English has entertainment features. Black children use it all the time, and they are hyper-verbal. Black English is, not, however, a means for communicating pure and simple. The black oral tradition represents an Africanism in our culture.

In black English meaning is often couched in style. Black preachers frequently say very little, according to Johnson, but they say it with style. The genius of Martin Luther King was in his style, through which uneducated black people got contextual clues; they got meanings through the style. Functional language is a bit different in American culture.

Black dialect is not simple, as commonly thought. Not only is it complicated, but the children who use it can accomplish things that

speakers of Standard English cannot. Johnson illustrates this through tense, as follows:

> "In Standard English the way to indicate past tense is with an "ed". This is how it is represented in writing. You pronounce it differently depending on the phonemes. Okay. But all you say is—suppose somebody said, "Did you talk to Sam?" And I said, "Yeah, I talked to Sam", or "I talked with her." —let's put another letter following that "ed" so we can put the "ed" in there. "I talked with Sam." All you know is that sometime in the past I talked with Sam; that's all you know.
>
> Black folks, however—and everyone of you in here knows this—we can indicate how long ago in the past I talked with Sam. If Orlando says, "Hey, Ken, did you talk to Sam?" If I said, "Man, I been taking to Sam." That's a long time ago in the past. "I talked to Sam," is general. But "I been taking with Sam," that's a long time ago. But I can go one step further, can't I? How can I show Orlando that I talked so long ago with Sam that he shouldn't even be asking me the question? By putting "done" in there. It's almost a contraction. What would you call that? You see, we do things we don't even have labels for. You don't say "I been done talking to Sam." You say, "I done been talking to Sam." It used to be a falsetto at that point to show him, you see. Or you could say, "He done been gone," "He been done gon," you see. A long time ago, you see. And that's interesting, because Standard English can't make those kinds of distinctions, you see.
>
> Now, what implications does that have for teaching language to our kids? They have to realize that some of the things that they are doing are impossible to do with Standard English. Orlando mentioned the term, "contrastive analysis." You have to take what Standard English is, what our kids are doing, and contrast them. You say, "Come here, black kids. Here's how you are doing to show tense. Here is how Standard English does it," and you have to show them equivalencies. It's almost a translation process. But they have to be shown that because they don't know. But you have to wind up phonemes that they lack and

> phonemes that they have to acquire in Standard English and show them they need to do this, you see. That's contrastive analysis. We don't do that. All we do is tell kids, "Don't say it like that; say it like this."

Johnson continously emphasizes the predictability of black English. The phonemes, whether they are indicative of standard English or not, are predictable. Blacks do not just make random sounds or use grammar in random ways. Because language is rule-governed, contrastive analysis represents a good approach to correcting language or, at least, to showing dialectical differences. Furhter, it is through being able to make contrastive analyses between or among dialects that teachers can learn to distinguish kids who are speaking within the norm of their culture group from those who need to see a speech therapist.

Considerable controversy took place in the group over when one should lay a foundation for Standard English. Johnson is of the opinion that the laying of the foundation needs to be delayed until the intermediate grades. He has never seen it successfully done in the early grades. He is of the opinion, however, that if you place a second-grader in an environment where Standard English is necessary, he will learn to switch back and forth.

Johnson's speech trailed off in general discussion over the age at which one should begin to teach Standard English and the efficiency of the contrastive model, designed for adolescents. The question of whether some of the hypotheses entertained had been tested came up. It turned out that they had not, and Orlando Taylor stressed the need for a research base for some classroom experiments.

What Johnson recommends explicitly and implicitly in the way of future steps are the following:

1. A more detailed definition of black Standard English
2. The training of communication skills teachers to distinguish among dialects of English and to master the principles necessary to have some sophistication in applied linguistics.
3. The resolution of the question of when to begin the teaching of Standard English and the preparation of strategies and software for doing so, if this is to take place below the intermediate grades.

Termination of the Conference

The Conference started moving toward a close on the following statement from Mrs. Simmons of the NAACP.

> We ought not to leave here before deciding on the issues that need to be addressed in the context of strategies for solving problems of language acquisition. Also, we should set up a mechanism that will get some results within X number of months. Dan Collins suggested that ISE take the responsibility for contacting the Rockefeller Foundation relative to underwriting the cost of a group such as the one assembled over a three-year period. This foundation it was hoped, would finance conference and research activities. Berrian asked Collins for a planning grant, which would result in a synopsis of the conference proceedings, to be used for in-house purposes and a proposal to be sent to the Rockefeller Foundation. Two-thousand dollars were promised for this purpose. The synopsis was to be in the form of a blueprint for action.

During this discussion an ad hoc committee was busily preparing a press release, the text of which appears at the beginning of the synopsis as reflective of the conference objectives. This was read and approved. The group then broke up with the understanding that during the coming months, it would pool its resources and continue to develop a data base to be used to influence national public policy on the teaching of language skills in the nation's schools. Al Berrian and Mariana Davis were left with the task of getting out the synopsis and laying the groundwork for a proposal. The statement prepared above and the sections below should serve to complete primary conference objectives.

What Has Been Accomplished

The conference, Strategies for the Acquisition of Standard English, has accomplished the task of identifying a hard-core of concerned professionals sufficiently concerned with the problem to devote their expertise to its solution on a continuing working basis. As a result of inviting Ms. Althea Simmons, director of education for the NAACP, two of the conferees, Dan Collins and Al Berrian were invited to participate in the NAACP National Invitational Work Conference on Quality Education. This resulted in a spin-off of Atlanta conference concerns into the broader concerns of the NAACP. Further, both the smaller and larger conferences had as a goal the mobilization of the black community in support of critical philosophical and programmatic objectives.

One might count among what has been accomplished mechanisms already in place for the provision of critically needed training—for ad-

ministrators and teachers alike. These include graduate departments in emerging black universities and a six-week workshop in Curriculum and Faculty Development run annually by ISE. The workshop represents a curriculum planning and materials development mechanism in the service of over 40 institutions bound together in consortial arrangements. The standing ISE staff, which can be expanded to include consultant/specialists in linguistics, provide for continous follow-through, while the institute, as a whole, acts as a catalyst for change at both administrative and instructional levels.

What Remains to be Accomplished

What is still required for our purposes is a formalized arrangement that brings ISE, graduate English departments in emerging historically black universities and professionals in communication skills areas together in systematized planning, in-service training, curriculum development and program implementation efforts.

Immediate needs call for a crash research effort which will provide a theoretical base for software. Secondary but short-term needs call for descriptions of: 1) Standard English; 2) Southern standard English; and 3) black Standard English. The three should be described and contrasted in terms of two varieties: that used for public broadcasting purposes; and that use for colloquial purposes. These descriptions should assume audience capability in the understanding of symbols customarily used in phonemic transcription and typographical convention. In cases where this capability is lacking, the summer workshop, described above, stands as a place, where knowledge and skills in this area may be required.

Tables must be developed for the vowels, semi-vowels, dipthongs and consonants for all three classes of English under discussion, followed by definitions and descriptions of effects. Included in the definitions should be those of intonation, stress and pitch, disjunctures, and morphophonemic alternatives and inflections. Additional tables and descriptive materials should deal with pronomial and verbal sketches, pre-fixation, suffixation, affixation and phrasal and clausal structures.

Realization of the resarch effort (subject to modification) will represent a quantum jump with reference to black needs in the area of language skill acquisition. Still to be worked out, preferably as a preliminary to the above, is how to move black students forward in measurable ways, based on present deficits. This is, in part, a political problem, tied to mustering up the courage to decide what criteria will be selected, how credit is to be granted and against what time frames, and what exit criteria will be required. These decisions may have to go against the grain of those normally expected where traditional students constitute the bulk of an institution's clients. The Benedict College experiment, the

communicators skills aspects of which come under Marianna Davis' direction, portends apartial solution to this problem.

The needs are clear and the accomplishments still to be made equally clear. Also, though in incomplete form, we have before us a blueprint for action.

List of Conference Attendees

Dr. Albert H. Berrian
Vice President
Institute for Services to Education

Dr. Ancella Bickley
Academic Vice President
West Virginia State College

Dr. Gloria Blackwell
Chairperson, Dept. of English
Clark College

Dr. Elias Blake
President
Institute for Services to Education

Dr. Dilla Buckner
Sr. Program Associate - English
Institute for Services to Education

Mr. Ben Colbert
Program Officer
Educational Testing Service

Dr. Dan Collins
President, Urban Division
Harcourt, Brace and Jovanovich

Dr. Thelma Curl
Chairperson, Dept. of English
Norfolk State College

Dr. Marianna Davis
Professor of English
Benedict College

Dr. Pauline Drake
Director, Inst. for Teaching
and Learning
Spelman College

Dr. Dianna Ferguson
Professor, Speech & Hearing Therapy
Howard University

Dr. Sandra Gibbs
Director, Minority Group Affairs &
Special Projects, NCTE

Dr. Ken Johnson
Assoc. Prof. of Education, &
Dir., Inst. Race & Comm. Relations
Univ. of Calif., Berkeley

Dr. Carol Gibson
Director, Education
National Urban League

Dr. Reuben Kessler
Asst. to Academic Dean

Dr. Yvonne Miller
Professor of Education
Norfolk State College

Dr. Eunice Moore
Dean, Arts & Sciences
Alabama State University

Dr. Benjamin Payton
Ford Foundation

Dr. William Pickens
Chairman, Dept. of English
& Linguistics
Morehouse College

Dr. Bennie Reeves
Chairman, Dept. of History
Jackson State University

Ms. Althea Simmons
NAACP, New York

Dr. Orlando Taylor
Chairman, Dept. of Speech
Howard University

Dr. Joseph Thompson

Dr. Johnny Tolliver
Head, Dept. of Mass Communication
Jackson State University

Mr. Maceo J. Washington
Program Associate, Reading &
Communication Skills, ISE

Dr. Darnell Williams, Assoc. Prof. of English
Jackson State College

Dr. Mary M.B. Hutton, Dept. of Afro-American Studies
University of Georgia

APPENDIX

Words, Analysis and Use

Purpose of the Material

The material below was prepared in the interest of developing reading skills. Such skills are, of course, of a comprehensive nature, involving word attack, vocabulary, comprehension, study skills, area reading skills and specific items, such as the interpretation of maps, tables, graphs, charts, diagrams, signs and application forms. The work below is limited to vocabulary development as that relates to context clues, prefixes, roots, suffixes and combining forms, compound words, denotation and connotation. To some extent, the material should be of some value for improving comprehension skills. No work has been done here on teaching methodology or the development of teaching materials out of the data included.

Some Definitions

1 - Roots, when defined from a morphological perspective, represent bases to which vowels acting as stems and infixes, prefixes, and suffixes can be attached. The root, as in the case of *arthritis* is irreducible.
2 - A prefix serves to make the base less vague. It is united with the beginning of the base (or the full word) to modify its meaning. For example, the term *react* is composed of *act* and *re,* serving as the prefix. The word *react* refers to a reciprocal or return act.
3 - A suffix is attached to the end of the base (or the full word) to modify its meaning. For example, the term *actor* is compounded from *act* and *or. Or* serves as the suffix. It makes a predicate noun of *act* and denotes an agent or doer who exhibits the quality expressed in *act.*
4 - A combining element, as used here, indicates a formation on a stem or simply an element to form a compound. Examples of combining forms appear in the word *photograph.* In this illustration both the elements *photo* and *graph* have combining qualities. *Photo* signifies a picture and *graph* an instrument for transmitting the picture. These two elements were independent words at one time. but have been reduced to formative or derivative elements. Their compounding for the production of *photograph* gives us a term which may be regarded as a noun or a verb and which has to do with a picture gained through the process of photography.

The significance of roots, prefixes, and suffixes may be best high-

lighted by a listing and a discussion of some of each. Those appearing below do not exhaust the total but are representative.

Roots: Only a token demonstration will be made of roots since accuracy in recording them in large numbers is nearly impossible. It is not altogether clear as to how roots should be categorized.[1] for this reason, this study will refer to rootlike elements for its listing of these forms.

The English words *factory, perfect,* and *manufacture* may be used as illustrations of the meaning of a root. You will notice that they have in common the element *fac* (*fec* is a modified form of *fac*). This element is properly considered the root of all three words. This element is based on the Latin term *facere* which indicated a "doing" or "making". The fact that the basic meaning of all three words envolves from the root *fac* is clearly understood, when *factory* is defined as a building or place where things are produced or made; when *perfect* is defined as indicating "making complete"; and when *manufacture* is defined as the process of making by hand or machine. It does not always hold true, however, that words containing similar root formations will be similar in meaning. You might say that the meaning of words are often similar as a result of the duplication of roots, but time and social and psychological factors very often change the original meaning of a word. Take the word *spangle* for example. It is a diminutive of the Anglo-Saxon word *spange* meaning clasp. With time this term came to represent a small plate of shiny metal, then sparkling plates stitched on a dress. Finally, it superceded its existence as a mere substantive and took on verbal atributes. Now, spangle may signify all of the above plus the meaning *to glitter.*

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[1]They are of both verbal and pronominal varieties. Whether they were originally monosyllabic or disyllabic has long been open to controversy. Also elements which we often consider single roots or stems are many times the result of fused roots. Because of this, some grammarians speak of English words as being derivatives of certain combinations rather than of having roots as such.

English is a Teutonic language. In a large sense, it belongs to that language family known as Indo-European. In a specified sense, it is Germanic in structure and is closely akin to German, Dutch, and Frisian. It's words, however, are largely of Greek and Latin origin, goodly number of them being of French inception. There are also a number of Anglo-Saxon and Scandinavian formatives in the English language, not to mention some borrowings from almost every major language, past

and present. Consequently, the etymology of English words presents a challenging problem. Persons interested in the geopolitical and other cultural factors influencing the development of the English language might find Mario Pei's *The Story of English* not only a valuable source of reference but an interesting one.

Root-Like Elements:

A
act (ag)
agger
alacr
anim
api
audi
avi

B
barb
brav

C
capt (cept)
caval
celer
cent
chut
cliv
clud
coct
corp
cresc
culmen

D
domin
dorm
duc
duct
dur

E
err

F
fac (fec, fic)
fauc
fer
ferv
flagr
flex
flor
foli
fort
frag
fruct
fulg
fum (e)

G
glomer
gnost
grad
gramm
gran
grat
grav
greg
gress

H
her
hibern
hilar

I
insul

J

ject
junct
jur

L

leg (!egat)
liber
lig
loc

M

magn
memor
mir
mit (mis)
mot (mov)

N

nav (nau)
nect
nomen
numer

O

opin
orb
outr

P

palp
pe:l
pel (puls)
pend
plaud
plex (plect)
plumb
plur
pom
popul
port (1)
port (2)
prim
prob (prov)
punct (1)
punct (2)

Q

quart

R

rect
reg
regul
rupt

S

salv (salut)
sanct
script (scrib)
sect
sed
semin
sent (sens)
serv
solv
spers
splend
stru (struct)

T

tact
ten (tain)
termin
tort
tract

U

umbr
urbs

V

vac (vacu)
valv
veloc
verb
vigil
vir
voc
vulg

Act is a derivative of the Latin *actus*. It refers to doing or driving. To *activate* is to render capable of being active. An *agent* performs or, at least, has the power to do so.

Agger is from the Latin *aggerare*, meaning to heap up. When a point is *exaggerated*, it is overstated.

Alacr comes from the Latin *alacritas*. It indicates briskness or promptitude. A person who walks in a brisk and lively fashion exhibits *alacrity*.

Anim, from the Latin *animales*, has to do with living phenomena. An *animalcule* is a tiny animal, invisible to the naked eye. An *inanimate* object is lifeless. To suffer *inanition* is to be exhausted from the non-assimilation of food.

Ann comes from the Latin *annus*, meaning year. The Latin term *anno Domino* (in the year of our Lord) is acceptable English, and *annals* (historical records) is a term quite similar to the Latin word for chronicles, annals. An *anuity* is payable yearly.

Api is derived from the Latin *apis*, meaning bee. An *apiarist*, one who keeps bees, deals in *apiculture* and protects his specimens in an *apiary*. Certain birds feed on bees and are said to be *apivorous*.

Arth is from the Greek *arthren*, meaning joint. A person with arthritis has inflammed joints

Audi, a derivative of the Latin *audire*, meaning to hear, refers to sounds. The adjective, *audio-frequency* pertains to currents or frequencies corresponding to normally audible sound waves. Something that is audible is capable of being heard.

Avi, from the Latin *avis*, pertains to birds. An *aviculturist* raises and cares for birds. An *aviator*, like the bird, is capable of flying.

Barb is from the Greek *barbaros* and the Latin *barbarus*. It refers to the bearded. For the botanist, a *barbate is beset with long stiff hairs. This term also connotes the wild and the uncultured.*

Brav, also from the Latin *barbarus*, connotes defiance. The term is antithetical to cowardly but is not without a signification of showiness. To sing *bravura* is to make a daring display of vocal brilliance. The Italian *bravo* is a despesado.

Capt (cept) is from the Latin verb *capere*, to take. A person held in *captivity* is in a state of bondage. A *captor* is one who *captures*.

Caval, a derivative of the Latin *caballus*, has to do with horses. A procession of persons on horseback is called a *cavalcade*. A *cavalier* was originally a mounted soldier.

Ced stems from the Latin *cedere*, to withdraw or to yield. To *accede* sometimes means to acquiesce. Prior to the American Civil War, some states *seceded* (withdrew) from the Union.

Celer comes down from the Latin *celer*, which pertains to the swift. An *accelerated* car is quickened. *Celerity* has to do with rapidity of motion.

Cent is derived from the Latin *centum*. It means a hundred or a hundredth. A *centime*, for example, is the hundredth part of a franc. The *centipede* is a myriapod which got its name from the fact that it seems to have a hundred legs.

Chute is of French origin. It designates a fall. A *parachute* is used for making a descent from an airplane.

Cliv is from the Latin *clivis*, meaning hill or slope. A *declivity* is a downward slope. A disposition or an inclination toward something is often referred to as being a *proclivity* toward.

Clud (clus) comes from the Latin *claudere*, to shut in. To *conclude* an argument is to end it or shut it off. In botany an *inclusion* is opposed to an exsertion.

Coct is a derivative of the Latin *cocuere*, meaning to cook. A *concoction* is literally a combination of different ingredients. A *cocktail*, when it refers to a drink, is used to indicate a liquor well mixed with flavoring ingredients.

Corp is from the Latin *corpus*, meaning body. A *corpulent* person has a goodly supply of body. A *corps* has reference to a body of persons.

Cresc is derived from *crescere*, a Latin word that means to increase. A *crescendo* has to do with gradually increasing the volume of sound in a musical passage. The increasing moon, conventionalized into the emblem of the former Turkish Empire, is known as the *crescent* moon.

Culmen comes down from *culmen*, a Latin term meaning top. When something reaches its highest altitude it *culminates*.

Domin is derived from the Latin *dominans*, having to do with ruling. In law, a *dominium* refers to an authority. The *dominator* is the ruling power.

Dorm is a derivative of the Latin *dormire*, meaning to sleep. The adjective *dormient* describes the sleeping. A *dormitory* provides for sleeping accomodations.

Duc comes from the Latin word for leader, *dux*. Mussolini, the chief of the Italian Fascisti, was known as *il Duce*. The term *induce* infers to leading on.

Duct is from the Latin *ductus*, which refers to a conduit. A *ductile* metal

is tractable. A *ductless* gland has no efferent *duct* for the purpose of secretion.

Dur means hardor lasting and comes from the Latin *dura*. To experience hardship is to be under *duress*. The *dura mater*, a tough membrane enveloping the brain and spinal cord is referred to as being *dural*. The wheat *Tricitum durum* is used in making macaroni.

Err stems from the Latin *errare*, which means to wander or to sin. An *errant* person is a wandering person. *Errastic* refers to not having a definite course.

Fac (fec, fic) are derivatives of the Latin *facere*. Illustrations from this root may be found near the beginning of this study.

Fauc comes down from the Latin *fauces*, meaning throat. *Faucal* is an adjective referring to the throat and a *faucet* permits water to be drawn from a pipe.

Fer is from the Latin *ferre*, to bear. *Efferent* has to do with bearing away. To *transfer* means literally to carry or bear across. To be fruitful is to be *ferracious*.

Ferv comes from the Latin word *fervere*, meaning to boil. The word *fervor* suggests a glow, and *fervency* connoted ardor.

Flagr is from the Latin *flagrare*, to burn. A *flagrant* error glares. While the crime is blazing (in the very act), we speak of it as being *flagrante delicto*.

Flex means bend and is derived from the Latin infinitive *flactere*. A turn or a bend is often described as a *flexure*. A person who adjust to changing conditions may be called *flexible*.

Flor is from *flos*, the Latin word for flower. A *florid* style is flowery. The art of cultivating ornamental plants is known as *floriculture*.

Foli is a derivative of the Latin *folia*. It refers to the leaf. *Foliature* is leafage. The word *folio* first described a leaf of paper folded over.

Fort comes down from the Latin *fortis*, meaning strong. A person who shows strength and courage is said to have *fortitude*. To *fortify* is to strengthen.

Frag comes from the Latin *fragilis*, meaning delicate or easily broken. A *fragment* is a part broken off. Many *fragile* things are brittle.

Fruct is derived from the Latin *fructus*. It has to do with fruit. A tree bearing fruit is said to be *fructiferous*.

Fulg, meaning shine, came down from the Latin *fulgor*. To be *refulgent* is to be resplendent.

Fum is a derivative of the Latin word for smoke, *fumus*. When one *fumig-*

ates, the applies a smoke or vapor. A *fumet* is an odor.

Glomer stems from the Latin *glomus*, meaning ball. In botany a *glomerulus* is a compacted cyme. An *agglomeration* or *conglomeration* is a cluster.

Gnost is from the Greek *gnostikos*. It has to do with knowing. The combining form *gnosis* denotes cognition for the psychologist. An *agnostic* is unknowing.

Grad comes from the Latin *gradus*. It means step. A *gradus* is one of a series of tiered steps.

Gram is derived from the Greek *grammatikos* and the Latin *grammatica*, both having to do with being skilled in letters. *Grammar* treats of the science of words.

Grat is from the Latin *gratus*, meaning pleasing. A *grateful* person is pleased. A *gratiutous* person gives freely and pleasingly.

Greg is from *gregis*, a Latin word meaning herd. To *congregate* is to gather in a group.

Gress is a derivative of *gradi* meaning to go in Latin. One goes out when he *egresses*. To *digress* is to go away from (the main point).

Her comes down from the Latin *haerere*; meaning to stick. An *adherence* is a firm attachment. To *inhere* is to belong.

Hibern has to do with winter and comes from the Latin *hibernus*. A *hibernaculum* is understood by the zoologist as a case giving covering for the winter.

Hilar has roots in the Greek *hilaros* and the Latin *hilaritas*. It is synonymous with joviality. A noisy, boisterous crowd often acts with *hilarity*.

Insul comes from the Latin *insularis*, meaning island. An *insulated* body, like the island, is placed in a detached situation.

Ject derives from *jacere*, Latin for to throw. An *injection* is pumped into the arm.

Junct comes from the Latin *junctio*, having to do with a joint. A *juncture* is a connection. In a *conjunctive* we have a connective.

Leg comes down from the Latin word *lex*, meaning law. Anything that is *legal* is governed by law.

Liber signifies free and comes from the Latin *liber*. A *liberal* education befits a man of free birth. To be *liberated* is to be disengaged.

Lig stems from the Latin *ligare*, to tie. A *ligature* is an act of binding.

Loc is derived from the Latin word *locus*. It refers to a place. A *locomotive* moves from place to place. A *locality* is a specific place.

Magn is taken from the Latin *magnus*, meaning great. Charles The Great, noted Frankish Emperor, was called *Charlemagne*. A *magnanimous* person is great of mind.

Memor is from the Latin *memor*. It has to do with being mindful. A *memorial* serves to preserve remembrance.

Mir is derived from the Latin *mirare*, which means to look. The *mirador* is an oriel window used in Spanish architecture. It provides a wide outlook. A *mirage* is an optical phenomenon.

Mit (mis) comes from the Latin verbal forms *mittere*, *missum*, having to do with send. To send forth authorities is often to send out a *mission*. To *remit* is to send back.

Mot (mov) is derived from the Latin forms *movere*, *motum*. It indicates moving. A *motor* is a prime mover. A place that is *removed* is generally *remote*.

Nav (nau) is from the Greek *nautilos*, meaning sailor and the Latin *navis*, meaning ship. *Naumachia* has to do with a mock sea fight. The term *naval* pertains to ships.

Nect is a derivative of the Latin *nectere*, to bind. *Connected* items are joined together.

Nomen comes from *nomen*, the Latin word for name. The *nom de plume* is the pen name. An appointment to an office is a *nomination*.

Numer is derived from the Latin *numerus*. It expresses number. The art of numbering is called *numeration*.

Opin, from the Latin *opino*, pertains to a belief. An *opinionative* expression is doctrinal in content.

Orb comes from the Latin *orbis*, meaning eye. Anatomically speaking, the *orbit* is the eye-socket. An *orbicular* object is spherical.

Outr comes from the French word for to exaggerate, *outrer*. This word is a derivative of the Latin *ultra*, meaning beyond. An *outre* costume is exaggerated.

Palp comes from *palpare*, Latin for to feel. A pain that is *palpitant* is a throbbing pain. A *palpitation* is a rapid pulsation.

Parl is from the French *parler*, meaning to speak. A *parliament* is a formal conference. The *parlor* is a room used primarily for conversation.

Pel (puls) is derived from the Latin forms *pellere*, *pulsus*. It has to do with driving. When an enemy is *repelled* or *repulsed*, he is driven back.

Pend comes from the Latin *pendere*, to hang. A *pendulum* is suspended from a fixed point.

Plaud is a derivative of *plaudere*, Latin for applause. A *plaudit* is usually expressed by clapping.

Plex (plect) comes from the Latin *plectere*, to twist. A *complex* is made up of interrelated parts. When things are *complect*, they are interwoven. A *plexiform* is like a network.

Plumb comes down from the Latin *plumbum*, meaning lead. A *plumbeous* substance resembles lead. The physician recognizes *plumbesin* as a condition brought about by the absorption of lead into the system.

Plur is derived from the Latin *pluris*, meaning more. A *plurality* reflects a multitude.

Pom comes from *pomum*, Latin for apple. *Pommiculture* is fruit culture. The substance of apples is referred to as *pomace*.

Popul is derived from the Latin, *populus*, having to do with people. Anything that is *popular* pertains to the common people.

Port (1) comes from the Latin *portus*, meaning a harbor. Boats enter the *port* to be relieved of their cargo. A *portal* is an entrance.

Port (2) comes from the Latin *portare*, meaning to carry. A *porter* carries luggage. One carries money in a *porte-monnaie*.

Prim is derived from the Latin *primus*, meaning first. A *primary* source is first in order. The forest *primeval* belongs to the first ages.

Prob (prov) is from *probare*, Latin for to prove. In legal parlance, a proceeding designed to ascertain truth is deemed a *probation*. One *probes* when an examination is conducted.

Punct (1) stems from the Latin forms *pungere, punctum*, having to do with pricking. A *compunction* comes from a sense of guilt (pricked conscience). A *puncture* is made by sticking or pricking.

Punct (2) stems from the Latin noun *punctus*, meaning a point. This term is related to *pungere, punctum*. A *punctual* person is observant of nice points.

Quart comes down from the Latin *quartus*, meaning fourth. A *quartan* returns every fourth day.

Rect is from *rectus*, the Latin word for right. In printing recto is opposed to verso and refers to the right-hand page. When somethind is rectified, it is made right.

Reg comes from the Latin *rex, regis*, meaning king. *Regalia* are the properties of kings. The *regency* refers to the office of the ruler.

Regul is from the Latin *regula*, meaning rule. When something is *regulated*, it is controlled or ruled.

Rupt is derived from the Latin *rumpere, ruptum,* referring to break. That which is capable of breakage is *rupturable.* One something is broken asunder, it is *disrupted.*

Salv is derived from *salvare,* to save. A *salve* is used to assuage. When something can be saved, it is *salvable.*

Sanct comes from the Latin *sanctus.* It means holy. A *sanctuary* is a consecrated place. One's inner *sanctum* is his most private retreat.

Script (scrib) comes down from *scribere, scriptum,* Latin terms relating to writing. The *scripture* is a written document. A *scribe* was a public writer.

Sect is from the Latin, *secare, sectum,* pertaining to a cut or a division. A Protestant nonconfirmist was once known as a *sectary.* A *sect* is formed of a dissenting party.

Sed is derived from the Latin *sedere,* which means to sit. A non-nomadic people are described as being *sedentary.* A *sediment* settles to the bottom from a liquid.

Semin is a derivative of *semen,* Latin for seed. In biology anything that is *seminiferous* is seed-bearing.

Sent (sens) comes from the Latin for feelings, *sentiens.* Consciousness may be referred to as *sentience.* A *sensitive* person is responsive.
Serv is a derivative of *servire,* Latin for to serve. A *servile* person is submissive or slavish.

Solv comes from the Latin *solvere,* which means to clear up. An institution is said to be *solvent* when it can pay all debts.

Spers is a derivative of the Latin *spargere,* to strew. When something is *dispersed,* it is moved into different parts (dissipated). *Aspersion* occasionally refers to a spray.

Splend comes down from *splendere,* Latin for to shine. A *resplendent* object is lustrous.

Struc (struct) is derived from the Latin *struere, structum,* having to do with arranging or constructing. One something has composition, it has *structure.*

Tact stems from *tactus,* the Latin for a touch. A *tactual* phenomenon produces the sensation of touch. *Contact* may be referred to as *taction.*

Ten (tain) comes from *tangere,* Latin for to touch. A *tentacle* is tactile. To reach one's ends is to *attain* them.

Termin is a form of the Latin verb *terminare,* which means to set a limit to. The *terminable* is limitable.

Tort is a derivative of the Latin verb *torquere,* which means to twist. One

extorts by wresting (unlawfully).

Tract is derived from the Latin *tractare*, to draw. Something that is *tractile* is tensile, capable of being drawn.

Umbr comes down drom *umbra*, the Latin for shadow. An *umbrella* acts as a shade. The nucleus of a sunspot is called an *umbra*.

Urb comes from *urbis*, Latin for city. To be *urbanized* is to have city characteristics (be polished).

Vac (vacu) is a derivative of *vaccuum*, Latin for empty space. To be in an empty space is to be *in vacou*.

Valv is from *valva*, the Latin for leaf. A *valve* in biology may be a lidke portion.

Veloc comes from the Latin *velox*, meaning speed. A rapid tempo is *veloce* to a musician.

Verb is a derivative of the Latin *verbum*, meaning word. To deliver somethind *verbatum* is to deliver it word for word.

Vigil comes from the Latin *vigil*, meaning awake. A state of *vigilance* is one of wakefulness.

Vir comes directly from *vir*, Latin word for man. A *virile* person exhibits manhood. *Virilism* is female abnormality.

Voc is a derivative of the Latin *vox*, meaning voice. A *vocable* is utterable. The term *vocalic* pertains to vowel sounds.

Vulg is a derivative of the Latin *vulgus*, meaning common people. A *vulgarism* is an expression used colloquially only.

Prefixes:

A	*B*	*C*
ab (abs, a)	be	cata
ad (ac)	bi	co (com)
amido (amino)		cis
amphi		citra
ana		con
ante		contra
apo (ap, aph)		
arch		
D	*E*	*F*
de (dis)	en	for
deca	equi	fore
demi	eu	
di	ex	
dia	exter (extra)	

dys		
G	*H*	*I*
geo	hemi	in (il, im, em)
	hyper	
M	*N*	*O*
mis	non	ob
		octa
		oxy
P	*Q*	*R*
para	quasi	re
per		
peri		
prae (pre)		
pre		
pro		
S	*T*	*U*
semi	trans	ultra
sub		un
super		
sur		
sym (syn)		

We may discuss these prefixes alphabetically. *Ab* comes from the Latin prefix *ab*. It generally means from or away from. Examples of this prefix are found in English in the words *abstain* adn *abstract*. *Abstain* is a verb which refers to a refraining from. *Abstract* may be considered a verb, a noun, or an adjective. In any event, it has to do with the principal qualities of an object and their disengagement from that object. In the word *abvolt*, *ab* is used to indicate a C. G. S. electromagnetic unit.

Ad comes from the Latin prefix *ad*. In the English word *adhesive* it serves to indicate a sticking to or an adherence to. In the word *adjacent* it indicates a proximity to. In the word *add* it represents addition. In theword *admonish* it is used as an intensifier.

Amido is a prefix that has a background in the area of chemistry. It has its base in *amide* a compound resulting from replacement of one or more atoms of hydrogen in amonia by univalent acid radicals. An example of it may be found in the term amidogen, the radical NH_2. Occasionally an amide is referred to as an amine.

Amphic is a Greek prefix signifying both and around. It carries the same implications in English. The word *amphimixis*, for example, refers to interbreeding or the interaction of the germ plasma of two individuals in sexual reproduction. The *amphibrach*, a three-syllable poetic foot, is short at both ends. That is, the first and third syllables are stressed while

the middle one is unstressed.

Ana is of Greek origin. It usually denotes up or upward. The term *anabatic*, for example, is an adjective that has to do with upward moving. *Anabolism* refers to constructive metabolism. Sometimes this prefix means again. For example, in optics, *anaclastic* refers to refraction. Another illustration may be found in anabiosis, which denotes resuscitation.

Ante, from the Latin *ante*, denotes before, as is exemplified by the terms *antedeluvian*, and *antewar*. In the terms *antebellum* and *antecede*, it carries the idea of anterior.

Anti, from the Greek *ant* or *anti*, denotes opposite, as in *anti-Republican* or *anti-Democrat*. It carries the aspect of position with this meaning in antisolar, and it has medical connotations, as in *antiseptic* and *antibiosis*.

Apo comes from the Greek preposition *apo*. It designates a detachment or a being away from. The *apogee*, for example, is that point in the orbit of a celestial body that is at the greatest distance from the earth. An *apostate* is one who abandons principles which he has voluntarily declared. In the word *asunder*, we see the intensive factor possible in this prefix.

Arch, when used as a prefix refers to that which is primary or eminent. An *archrogue*, for example, is a rogue in a very professional way, while an *archdeacon* is only below an archpriest or a bishop in rank.

The prefix *be* is of Anglo-Saxon origin. It is used for a variety of purposes. It carries the meaning of over, or on all sides when used with some verbs - for example, *bedeck* and *belay*. At times it intensifies the meaning of the verb-for example, *besmirch*. Occasionally, it carries the idea of to provide with, as in *bejewel*.

Bi is a prefix of Latin origin. It generally denotes double or two. The words *bisect* and *bilateral* are examples.

Cata (cat, cath) is a prefix of Greek origin. It denotes downwards as in *catabolism* (destructive metabolism) or *catapult*. In a word like categorical or like *catechize* when it refers to a systematic questioning the denotation is one of completion. In some words the effect of *cata* is not felt, as in *catholic* which fundamentally means universal.

Circum is a Latin prefix signifying round about. You are probably familiar with the terms *circumlocution* and *circumnavigate*. Certainly, the *circle* is a common symbol.

Cis is a Latin prefix usually signifying on this side of. *Cisalpine*, for example, referred to on the Roman side. Students of Latin have probably

read about Cisalpine-Gaul. *Citra* is a variation of *cis*.

Co (com) signifies joint. It is a Latin prefix. For example, two men may co-author a book. a co-educational institution is one in which males and females study and learn side by side. In mathematics *co* indicates a complement, such as the *cosine*. *Col* as in *collect* is also an assimilated form of *co*. In *con amore*, Italian for with love, we find that *con* is equal to *com*. This is usually true before consonants except b, h, l, m, p, r, and w.

Con is of Latin origin. It may represent *co* as discussed above or may represent *contra*, a Latin prefix meaning in opposition to.

Contra may be illustrated by *contradict* and *contrapuntal*.

De goes back to the Latin *de* or *dis* meaning away from. It is common in French as *de*. The idea of coming down from is found in the word *dehack*. In the word *derail* a separation is implied. There is an intensification in the word *debauch* and a deprivation in the word *decompose* (also in disorganize).

Deca is of Greek origin and means ten. *Decade* and *decasyllabic* serve as examples.

Demi, usually meaning half, is commonly seen in the word *demi-tasse*. In a word such as *demimondaine* the implication of something below standard comes into play.

Di as a prefix may refer to the Greek *dis* signifying double or the Greek *dia* denoting apart, or the prefix *dis* discussed with the Latin prefix *de* meaning away from. *Diacid* may be used as an illustration of the first possibility, *diacritical* as an illustration of the second, and *dialysis* an illustration of the third.

Dys is a prefix of Greek origin expressing the bad or the difficult. *Dyspathy* and expecially *dysentery* afford excellent examples.

En as a prefix signifies in or into. It is of Greek origin. Occasionally it exhibits subtle denotions. For example, *en bloc*, a French expression borrowed by the English means in a lump. At times the prefix *en* is derived from the Latin in or into.

Equi comes from the Latin *equus* which means equals. An *equilibrist*, for example, demonstrates an excellent *equilibrium*.

Eu, a prefix meaning good (in the sense of favorable), is of Greek extraction. If one enjoys *eupepsia*, he has good digestion. *Eugenics* is a science of the well born.

Ex, from the Latin *ex* meaning out of or out from, usually carries this significance in English. The terms *excavate* and *except* afford illustrations. In a word such as *exacerbate*, however, this prefix denotes a thoroughness or completion.

Exter, or more commonly *extra* are Latin derivatives. When prefixed to a word, they form adjectives, as in *extrajudicial* and *exteroceptive*. They denote that which is outside of.

For, as a prefix, is of Anglo-Saxon origin. When it is not used merely as an intensifier (*fordo*), it means off. *Forbid*, for example, actually means to warn off.

Fore also is of Anglo-Saxon derivation. It denotes beforehand. We hear it in the naval expression *for and aft*. *Forewarn* is another exemplification.

Hemi is a prefix of Greek origin meaning half. North and south of the equator we have the northern and southern hemispheres respectively.

Hyper is from the Greek *hyper* meaning above. *Hypersensitivity* and *hyperneurotic* are terms often heard in this day of psychoanalytic excursions. Sometimes the teacher is looked upon as being *hypercritical*.

In (il, im, em) is derived from the Latin proposition *in* meaning into, toward, or on, from the English adverb *in*, or is akin to the English *un*. The word *inarticulate* means not articulate. The preposition *into* denotes a going within. In the word *inactive*, *in* is of and inseparable nature.

Mis is a prefix of Anglo-Saxon and Teutonic origin. It generally means wrong or ill. For example, one may be *misguided* or *misled*. Bad information may be described as *misinformation*.

Non is a Latin prefix carrying the same idea as *in* or *un*, though in a less emphatic sense. The difference between them may be noted by the adjectives *nonpartisan* and *impartial*. The first term is of a negative nature, the second of a positive one.

Ob is a Latin origin. It may mean against as in *objection* or reversed, as in *obconical*.

Octa is from the Greek. It has to do with eight. The musical term *octave* is a common example. *October* was so named because it was the eighth month of the ancient Roman year.

Oxy as a prefix has to do with the presence of oxygen, as in *oxyhydrogen*. It is not to be confused with the combining form *oxy* from the Greek *oxys*.

Para is of Greek origin. It someties means beyond, as in para-magnetic. It may mean besides or alongside of as in *parasynapsia*. Other times it indicates an interaction as in *parasynthesis* or *paramorphism*. The medical term *paranoic* describes a person with a mental disorder.

Per is a Latin prefix which signifies a thoroughness, as in *perfect*. In chemical parlance, it refers to the presence of an atom having a high valence, as in *peracid*.

Peri comes from the Greek. It means around. *Perimeter* is an example.

Post is a Latin prefix usually meaning after, as in *postscript*. In *posthypnosis* it means subsequent to hypnosis.

Prae is a variant of *pre*. For example, *praeposter* may be used instead of *preposter*.

Pre is a Latin prefix denoting priority. A *preadolescent* is one who goes through that period preceeding adolescence.

Pro is a Latin prefix usually denoting beforehand. A *proposition* is an example of this. In the case of the term *pronoun*, however, this prefix means in place of. In *pro-Democratic* it carries the meaning of in favor of, and in *prosencephalan* the idea of toward. In this last term *pro* is a Greek derivative.

Quasi is a Latin derivation. It reflects a similarity, as in *"quasi una sonata"*.

Re is a Latin prefix denoting either backwards or again. One who *retrogresses* goes back to a former state. A *renaissance* is a rebirth.

Semi is a Latin prefix denoting half or slightly more than. A semi-annual affair occurs at the completion of the half year. A *semi-educated* person is slightly educated.

Sub is of Latin origin. It signifies an inferiority or simply means somewhat. The *subconscious* refers to the lowest degree of consciousness.

Super, also, a Latin prefix, specifies above or over. The United States is, in actuality, a superstate. Those of us who possess a moral conscience exercise a *superego*.

Sur is equivalent to super. The *surtax* is an illustration.

Syn (sym) is of Greek origin. It means along with or simultaneously. Things that are synchronized or coincident. We are all familiar with the *symphonic* form.

Trans is a Latin prefix meaning aoross or beyond. Christians know of the transfiguration.

Ultra is from the Latin and means beyond (in space). *Ultranationalism* describes nationalistic feelings that are of an excessive nature. *Ultraism* is often synonymous with radicalism.

Un is a prefix of Anglo-Saxon origin signifying not. *Un-American* activities, for example, are not in keeping with American interests.

Below is a similar classification and discussion of the suffixes.

A

able (ible)
ac
acious (acity)
acy
al
an
ana
ance (ancy, ence, ency)
ary
ate
ation (ition)
ative

B

ble (able)
burg

C

cle

E

ed
en
ent (ant)
eous
er
ery

F

facient
form
ful

G

genous (gen, geny)
gerous

H

hood

I

ial
ian
ic
in (e)
ion
ious
ist
ite
itol
ity
ive
ize

L

less
let
ly (lier, liest)

N

ness

O

or
ous (ious)
oma
ory
ose

R

ry (ery)

T

ter (tor)

A comes from the Latin *ab* meaning away from. *Asepsis* has to do with the absence of infection.

Able (ible) comes from the Latin *habere* meaning to have or to hold. If a writing is legible it has the capacity to be read.

Ac may be an assimilated form of *ad* before c and q. If so, it is of Latin origin. Ordinarily it is an adjective or noun forming suffix coming from the Greek *akos*. *Elegiac* and *aphasiac* are an adjective and noun respectively.

Acious is of Latin derivation. It is often replaced by *acity* and denotes given to. Examples are *vivacity* (a noun) and *vivacious* (an adjective).

Acy denotes quality or state. Examples are *intricacy* and innacuracy.

Al comes from the Latin *alis* and means pertaining to. It usually forms adjectives from nouns, as in *visual* or *perpetual*. In a word like *animal* it demonstrates an adjective transformed into a substantive (noun).

An is of Latin origin. It means pertaining to or belonging to. *Epicurean* is an example. *American* is another. *An* generally forms adjectives.

Ana is the neuter plural ending of Latin adjectives in *anus*. It usually refers to a designated subject or something literary. Note the *Encyclopedia Americana*. "Tropicana" is the name of a musical composition, the mood of which evolves from ideas of the South American tropics.

Ance (ancy, ence, ency) comes from the Latin *antia* or *entia*. It sometimes refers to the action that the verbal root indicates, for example, *sustenance* (from sustain) and *submergence*. Sometimes it simply refers to a state of being, for example *permanency*.

Ary is of Latin origin (*arius* or *aris*). It forms adjectives which imply pertaining to, as in *monetary* and *insurrectionary*. In the word *mortuary* we have a noun that has to do with a place for.

Ate may represent the Latin noun ending *atus* or the similar Latin ending for the past participle of first conjugation verbs (verbs ending in *are*). When forming nouns, it usually refers to a function. An example is a *syndicate*. Very often this suffix forms verbs with the meaning of treat with. *Chlorinate* is a term that would be familiar to soldiers who drank water that had to be chlorinated.

Ation (ition) comes from the Latin *itionem*. It forms nouns from verbs and often indicates the action implied in the root of the verb. These verbs occasionally end in *ate*. For example, *orchestration* is formed from orchestrate. Sometimes this suffix transforms the verb sense into a concrete objective. *Instigation*, for example, is the end result of instigate.

Ative is derived from the Latin *ativus*. It carries the sense of in the nature of. The term *substantive* is an example that is quite a propos.

Ble as a suffix is equivalent to *able*.

Burg as a suffix means borough. Williamsburg, a city in Virginia and Pittsburg, a city in Pennsylvania, afford examples.

Cle is a noun suffix derived from the Latin *culus*. It forms diminutives. *Cubicle* is an example.

Ed is derived from the Anglo-Saxon *ad* or simply *ed*. It forms the past participle of regular verbs. An example is *called*. Sometimes it forms adjectives from nouns, as in *gutted*.

En, also from the Anglo-Saxon is the past participial ending of many strong verbs. *Spoken* forms an example. In the verb *sicken*, this suffix carries the meaning of to render.

Ent (ant) comes from the Latin *entem*. It forms adjectives with present participial force. *Penitent* (from *repent*) is an example. *Ent* often refers to a person in the role of an agent, as the word agent indicates.

Eous is from the Latin ending *eus*. It forms adjectives and implies the meaning in the nature of. *Gaseous* is an example.

Er as a suffix forming the comparative degree of adjectives and adverbs is of Anglo-Saxon origin. As a suffix forming nouns denoting a person connected with, for example, *preacher*, it is of Latin origin.

The suffix *ery* comes from the Latin *arius*. It signifies behavior, as in *snobbery*. It also signifies a place where an aggregation takes place, for example in a *grocery*.

Facient comes from the Latin present participle *faciens*. It signifies producing or causing, as in *multifacient*.

Form comes from the Latin *forma*. It has to do with something that is in the structure of. An example is *uniform*.

Ful is a suffix of Anglo-Saxon origin. It means full of, as in *artful*, or it is a noun rather than an adjective suffix describing the quantity that would fill. An example of this is *armful*.

Genous is an adjective forming suffix. It denotes producing. *Nitrogenous* is an example. The words *indogenous* and *exogenous*, mean produced from within and produced from without respectively. This suffix forms adjectives from nouns ending in *gen* and *geny*.

The Latin suffix *gerous* denotes carrying or bearing. *Crystalligerous* is an example.

Hood comes from the Anglo-Saxon had and is a noun forming suffix. It denotes condition or character. *Spinsterhood* and *bachelorhood* form

examples.

Ia is of both Greek and Latin origin. It occurs in the names of malfunctions, as in *neurasthenia*. It is found in the names of the plural ending classifications of plants and animals, as for example, *mammalia*. In *hemiolgia* and *hemophilia* we see it in a medical sense.

Ial is an adjective suffix that contains the connective *i* as well as the *al*. We see it in such words as *visual* and *incidental*.

Ian, also an adjective suffix, contains the connective *i*. It comes from the Latin *ianus* and infers belonging to, as does the suffix *an*. We may note it in *andalusian*.

Ic, from the Greek *ikos* and the Latin *icus*, generally denotes characterized by or pertaining to. It occurs in *anostolic* and *barbaric*.

Ical comprises a compound suffix from the early Latin *icus* plus *alis*. It forms adjectives from nouns ending in *ic* or *ics*. For example, *theatrical* is formed for *theatrics*.

Ice comes from the Latin *iticus*. It refers to quality or act, as in *novice* and *service*.

Ician comes from the French *icien*. It is added to nouns to denote a specialist. An example is a *magician*.

Ine, from the Greek *inos*, denotes of the nature of. It forms adjectives and may be found in such words as *iodine* and *crystalline*.

Ion is a noun forming suffix from the Latin *io* having to do with a process. In English it denotes a process, as in *evolution* or a thing being acted upon, as in *projection*.

Ious is an adjective forming suffix. The *i* serves as a connective. It means full of, as in *audacious*.

Ism (reminiscent of the French *isme*) comes from the Greek *ismos*. It is a noun forming suffix and denotes action or manner of action. An example is *absolution*. It also denotes adherence to a particular kind of doctrine, as in *Monarchism*.

Ist, from the Greek *istes*, forms agent nouns denoting one who does, occupies himself with, or advocates. Examples are *cyclist, anthropologist*, and *communist*.

Ite, from the Greek *ites*, denotes a citizen of or one of a party of, as in *Hittite*. In *dynamite* and *melinite* it denotes an explosive. The suffix *ite* from the Latin *itus* forms adjectives and verbs from Latin past participle stems, as in *laborite* and *expedite*.

Itious is an adjective forming suffix. It denotes characterized by and is from the Latin *icius*. *Propitious* forms an example.

Itis is from the Greek *itis*. It is a noun forming suffix. As *peritonitis* indicates, it refers to an inflammatory disease of a specific part.

Ity forms abstract nouns. It parallels the suffix *ty* from the Latin *itas*. Words such as *pancity* and *mendacity* illustrate it.

Ive comes from the Latin *ivus*. As in *prospective*, it indicates a tending toward.

Ize is from the Greek *izoin* relates to transitive as well as to intransitive verbs. Examples are *hypnotize* and *fraternize*.

Less, from the Anglo-Saxon *less*, means without. An illustration is *friendless*. In *numberless*, it means beyond the range of.

Let has a diminutive force, as in *ringlet*. In *bracelet*, it denotes an article worn on. It is a noun forming suffix.

Ly denotes characteristic of, as in *motherly*. This adjective forming suffix is of Anglo-Saxon origin also forms adverbs from adjectives and participles, as in *swiftly* and *perplexedly*.

Ness is an Anglo-Saxon suffix which forms nouns denoting quality or state, such as *fineness*.

Oid comes from the Greek *eidies*, meaning form. The term *spheroid* means in the form of a sphere. *Asteroid* means in the form of a star.

Or is from the Latin *or*. It forms nouns and denotes an agent or doer, as for example, *auditor*. It also indicates a quality as in *favor*.

Ous comes from the Latin *osus*. It means full of and is an adjective forming suffix. The word *porous* means full of pores.

Oma, from the Greek *omatos*, has a medical denotation. It has to do with a morbid affection of some part as in *hematoma*.

Ory, from the Latin *orius*, forms both nouns and adjectives. It denotes pertaining to as an adjective formative and place for as a noun formative. Examples are *transitory* and *refectory* respectively.

Ose from the Latin *osus*, is equivalent to *ous*. We see it in technical words like *glucose* and *cellulose*.

Ry is simply a reduced form of *ery*, as for example, *jewelry*

In addition to prefixes and suffixes there are combining forms. These are usually words, or word elements, used with other words or word elements to form a compound. These forms are more numerous than the prefixes and suffixes combined. Reference made to these forms usually includes analyzing them as base compounds. They may be categorized as verb containing compounds. Oxidize is a verb containind compound. This term consists of the form *oxi*, which denotes the presence of oxygen

replacing carbon and *dize* which, in this case, gives the idea of combining something with oxygen. In the term *oviform*, we have two combining elements, *ovi* meaning egg and *form* meaning shape. A representative list of combining forms in the English language is given and considered below:

A
- adeno
- aer (aero)
- allo
- ambic
- andro (andr)
- anemo
- Anglo
- antropo
- astro
- auto

B
- biblio
- bio
- blasto (blast)
- brachio (brach)
- brevi
- broncho

C
- caco
- centi
- centro (a)
- cephalo
- cerato
- cero
- chemo (chem)
- chloro
- chromo
- cirri
- cirso
- coeno (coen)
- colous
- cosmo
- costo
- crat
- cyano
- cyclo
- cysto (cyst)
- cyto

D
- dactylia
- dactylo
- deci
- demono
- denti (dento, dens)
- deutero
- dextro
- dicho (dich)
- diplo (dipl)
- dyna

E
- ecto
- ectomy
- embryo
- endo
- ento
- entomo
- erythro

G
- gastro
- geo
- gonio
- gono
- gony
- grapho
- gyno (gyneco)
- gynous
- gyro

H
- hemo (hema)
- hepta
- hetero
- hexa
- homo

I
- iasis
- iatrics
- iatry
- ichthyo
- icono

L
- labio
- lacto
- litho
- logo
- logy

hydro (hydr, hydra)
irido
lyrico

M

macro
mal
mas
matri
mega
megalo
melano
micro
mono
mid
multi
myco
myelo
myo
myria
mythico (mytho)
myxo (mux)

N

naso
nastic
necro
neo
neuro
nitro
nocti
nycti

O

oculo (ocul)
odonto
oleo
omni
omphalo
oto
oxy

P

paleo
pan
para
pathy
pedi
pedo
penta
phago (phagous, phagy)
phane (phany)
philo
phony
phore
phospho
photo
phylo
phyllo
physio
phyto
pneumato
pneumono
poly
procto
pseudo

Q

quadr (quadri)

R

rheo

psycho
pterous
pyro

S	T	U
scopy	tauto	uni
sebi	taxes	urgy
sex (sexi)	tel (tela, telo)	urino
silico	terato (terat)	uro
spectro	tetra (tetr)	uter (utero)
spermo (spermato, sperm)	theo	
spheno (sphen)	thermo (therma, therm)	
sphere	thio (thi)	
sphygmo	tiacy	
spiro	tomy	
stamini (stamin)	tri	
strato	trope (tropic)	
stylo		

V	X	Z
vagino (vagin)	xantho	zoo
	xeno	zygo
	xero	zymo
	xylo	

Adeno comes from the Greek *aden*, meaning gland. An adenoid is like a gland.

Aer comes from the Greek *aer* meaning air. In English it is concerned with air or things aerial. *Aerostatics* and *aerotherapeutics* form examples.

Allo is of Greek derivation. It denotes differentiation or extraneousness, as in *allopathy*.

Ambi comes from the Latin *ambo* meaning both. A person who is skillful with both hands is said to be *ambidextrous*.

Andro, from the Greek *andros*, refers to man. In androgynous we get two combining forms compounded to convey the idea *hermaphroditic*.

Anglo, which comes from the late Latin *Angli* and is equivalent to English, usually refers to England and America. In such terms as *Anglo-Chinese* we have reference to international relations. *Anglo-Catholicism* denotes a specific set of religious doctrines and practices.

Anthropo comes from the Greek *anthropos* and refers to man. *Anthropology* is the science of the human organism.

Archaeo refers to that which is ancient. It comes from the Greek *arche* meaning beginning and is manifest in the commonly heard term *archaeology*.

Astro goes back to the Greek *astron* meaning star. The science, *astrology* treats of celestial bodies.

Auto denotes self or self-operating. It comes from the Greek *autos*. Automobile and *autobiography* are common examples of it.

Biblio, meaning book, comes from the Greek *biblian*. A *bibliophile* is a lover of books.

Bio comes from the Greek *bios* which has reference to life. *Bio-genesis* has to do with the development of living organisms.

Blasto comes from the Greek *blastos*. It has to do with a budding out or with things in their germinal stages. A *blastodisk* is the germinal disk. This term is used frequently in embryology.

Brachio denotes the arm. The upper segment of the arm is known as the *brachiem*.

Brevi comes from the Latin *brevis* and means short. *Brevity* has to do with briefness.

Broncho is derived from the Greek *bronchos*, meaning windpipe. *Bronchitis* denotes an inflammation of the bronchial tubes. A *bronchoscope* is used to remove foreign bodies from the bronchi.

Caco, means bad. It is derived from the Greek *kakos*. The chemist is familiar with the *cacodyl*, whose radicals are noted for their vile odor and poisonous constituents.

Centi from the Latin *cento* denotes a hundred. A commonly used word is *century*.

Centro means center. It comes from the Greek *kentron*. The adjective *centrobasic* relates to the center of gravity.

Cephalo relates to the head and comes from the Greek *cephalo*. The adjective *cephalic* relates to functions of the head.

Cerato is seen in the term ceratoid meaning horny. It is derived from the Greek *keras*.

Cero is from the Greek *keros* meaning wax. *Cerotic* acid occurs in beeswax.

Chemo was derived from chemical. It relates to chemical action or to chemicals. Witness the term *chemotherapeutics*.

Chloro means light green. It is derived from the Greek *chloros*. A much publicized commodity today is *chlorophyll*. *Chloroform* is a well-known

anesthesia.

Chromo, meaning color, is from the Greek *chroma*. A *chromoplast*, to a student of biology, is a pigmented plastid.

Cirri is derived from the Latin *cirrus*. It means ringlet. *Cirrocumulus* is a term well-known to geographers.

Cirso is from the Greek *kirsos*. It has to do with a dilated vein *Cirsoid* refers to a varicose vein.

Coeno is a combining form from the Greek *koinos*. It denotes common. *Coenocyte* is a botanical term which incorporates this meaning.

Colo, from the Greek *kolon*, denotes the colon. Note the term *colalgia*, a word formed from *col* referring to the large intestine and the Greek suffix *algia*, meaning pain.

Cosmo, from the Greek *kosmos* has to do with the world. We often refer to a harmonious universe as the *cosmos*.

Costo comes from the Latin *costa*, meaning rib. It is heard in biology in words such as *costectomy*.

Crat comes from the Greek *krates*. It refers to a type of government or to one of its members. Examples are *autocrat* and *democrat*. A *bureaucrat* is a governmental official.

Cyano is from the Greek *kyanos*. It refers to the color dark blue. It usually pertains to *cyanogen*.

Cysto refers to the bladder. It is from the Greek *kystia*. A *cystoid* has a bladder-like formation.

Cyto is from the Greek *kytos*. It denotes a hollow vessel or a derivation of cytoplasm. *Cytology* is a science that deals with the organic processes of the cell as well as with its structure.

Dactylia comes from the Greek *daktylos* which means digit. Deaf mutes communicate through an art called *dactylology*.

Dactylo is comparable to *dactylia*.

Deci from the Latin *decimus* refers to the number ten. In the metric system, a *decigram* is a tenth of a gram.

Demono comes from the Greek *daimon*. It has to do with demons.

Denti is from *dens*, the Latin word for tooth. *Dentosurgical* makes reference to dentistry and surgery.

Dentero, sometimes *deuto*, comes from the Greek *deuteros* meaning secondary. "Deuteronomy," the fifth book of the Pentateuch serves to repeat the law of Moses. *Deuterogamy* refers to a second marriage (following the death of the first spouse).

Dextro is from the Latin *dexter*. It pertains to the right. If something is *dextral*, it is on the right side. *Dexterity*, however, refers to nimbleness, and *dentrin* refers to a soluble gum-like carbohydrate.

Dicho is from the Greek *dicha*. It means in two. A *dichotomy* is a division. Certain insects are *dichro-matic*.

Diplo is from the Greek *diplos*. It has to do with double. A *diplomat* is often thought of as having more than one intention or at least disguised intentions.

Dyna has to do with power. It is derived from the Greek word *dynamikos* meaning power. We are familiar with some of the attributes of dynamite.

Ecto comes from the Greek term *ektos* meaning external. The biochemist is familiar with the term *ectoenzyme*.

Ectomy is from the Greek word *ektome* meaning incision. *Ectomy* in English refers to a surgical removal.

Embryo is from the combined Greek element *en* and *bryein* meaning to swell. The *embryologist* is a scientist who concerns himself with *embryogeny*.

Endo is from the Greek *endon*. It means within. The endocrine glands, for example, secrete internally. An *endophyte* is a plant which grows within another plant.

Ento is from the Greek *enton* and also means within. It is similar to *endo* and the words *entoderm* and *endoderm* may be used to express one and the same thing.

Entomo is derived from the Greek *entomon*. It has to do with insects. An *entomologist* is a scientist who deals with that aspect of zoology concerned with insects.

Erythro means red. It comes from the Greek *erythros*. An example of a metaphor is found in *erythrocytameter*. This instrument is used to count red blood corpuscles.

Gastro, from the Greek *gastros*, means stomach. *Gastronomy* is an art well understood by the epicure.

Geo, meaning earth, originally came from the Greek prefis *geo*. The science, *geology* is an example of this term.

Gonio is from the Greek *gonia*. It means corner. A *goniometer* measures angles.

Gono is from the Greek *gonos*. It refers to the sexual. A *gonium* is a biological term which denotes a mother cell descended from a psimordial cell.

Gony is from the Greek *gonia*. It too refers to birth. Cosmogony, which deals with the coming into being of the world, is an example.

Grapho, sometimes *graphy*, is from the Greek *graphein*, which means to write. Something that is *graphic* is well delineated. Occassionally *graphy* refers to a description of something, as in *geography*.

Gyno, as *gyneco* refers to the female. *Gynecology* is a science which treats of women and their hygiene. The Greek term *gyne* is the base of these terms.

Gynona is derived from the same source as *gyno* and *gyneco*. It pertains to pistels.

Gyro comes from the Greek *gyros*. It denotes a ring. A *gyroscone* is a wheel that spins rapidly about an axis.

Hemo (hema) refers to blood. It comes from the Greek *haima*. *Hematoid* is an adjective that means resembling blood.

Hepta is duplicated from the Greek and means seven. A plane of seven angles or sides is known as a *heptagon*.

Hetero is from the Greek *heteros*, which means other. It carries this meaning in English, as in the word *heterogenous*.

Hexa means six and comes directly from the Greek. A plane of seven angles or sides is known as a *hexagon*.

Homo comes from the Greek *homos*. which means man. It is sometimes opposed to *hetero*. The botanist often uses the term *homogamy*.

Hydro, from the Greek *hydor*. refers to water. A seaplane is often referred to as a *hydroplane*, and in this modern age, *hydroelectric* is a well known term.

Iasis is derived from new Latin. It is generally a medical term signifying a morbid condition, as in *mydriasis*.

Iatrics, from the Greek *iatrikos*, signifies the treatment of a disease, as in *psychiatric*(s).

Iatry, from the Greek iatreia, also has to do with the treatment of disease. Psychiatry is an illustration.

Ichthyo is from the Greek *ichthyo*. It has to do with fish. An *icthyologist* is a scientist who deals in that phase of zoology which treats of fishes.

Icono, from the Greek *eikon*, refers to an image. The word *icon* means image or representation.

Irido has to do with the iris and is from the Greek *iris*. The o is dropped in *iridectomy*.

Labio is from the Latin *labium*. It signifies the lip. In speech, *labiodental*

refers to lips and teeth.

Lacto means milk. It is derived from the Latin *lec*. The proteins in milk are referred to as *lactoproteins*.

Litho means stone. It comes from the Greek *lithos*. A *lithographer* is an artisan who puts writings on stones.

Logo is from the Greek *logos*. It means word or speech. *Logomachy* signifies a war about words.

Logy, from the Greek *logia*, refers to discourse. It may also refer to a science or a doctrine. *Logotypes* are used in printing. *Physiology* is that phase of the science of biology that deals with the functions of living organisms.

Lyrico comes from the Greek *lyrikos* down through the Latin *lyricus*. It has to do with a singing quality. A *lyrist* plays on a lyre or writes poetry that has subjective and lyric qualities.

Macro comes from the Greek *makros* meaning long. It refers to the visibly large. An example is apparent in *macrostomia*.

Mal is from the Latin *malus*. It denotes the ill or the bad. We have all been exposed to the *malcontent*.

Mas is from the Anglo-Saxon *maesse*, although its origin was in the Latin *misa*. It pertains to a festival. *Christmas* is probably the most obvious example of it.

Matri come from the Latin *mater*. It means mother. A *matriarchal* society traces the descent of the children along the mother's lines.

Mega is from the Greek *megas*. It means extended. An example is in the *megaphone*, a device to increase the volume and intensity of sound.

Megalo is also from *megas* and means great. The *megalomaniac* has gigantic obsessions.

Melano means dark. It comes from the Greek *melas*. *Melanic* refers to dark hair and dark skin.

Micro is from the Greek *mikros*. It is the opposite of *mega*, *megalo* and *macro*. A *microanalysis* is an analysis of minute particles.

Mid has to do with the mid part of anything. The expression *midnight* refers to the middle of the night.

Mono comes from the Greek *monos*. It signifies one. *Monotheism* is the doctrine that there is but one God.

Multi comes from the Latin *multus*. It means many or much. A *multimillionaire* is a possessor of many millions.

Myco, from the Greek *mykes*, means fungus. The *mycologist* deals with

the life phenomen existing among fungi.

Myelo comes from the Greek *myelos* which means marrow. *Myeloid* is an adjective which refers to the bone marrow or things like the bone marrow.

Myo is from the Greek *mys*. It refers to muscles. The science *myology* treats of muscles.

Myria is from the Greek *myrias* meaning myriad. *Miriapod* comes from the area of zoology and indicates this combining form.

Mythico (mytho) comes from the Greek *mythos* meaning fable. *Mythia-historical* refers to a combination of the legendary and the historical.

Myxo is from the Greek *myxa*. It refers to mucus. The slime molds are sometimes referred to a *myxomycetous*.

Naso is from the Latin *nasus* meaning nose. *Nasal* is an adjective derived from this term and pertains to the nose.

Nastic comes from the Greek *nastos* which means pressed. In botany leaves are understood to have nastic movements.

Necro, from the Greek *nekros*, refers to the dead. A *necropsy* is an autopsy.

Neo is from the Greek *neos* meaning neio. The modern Hebrew language is considered as being Neo-Hebraic.

Neuro is derived from the Greek *neuron* which refers to nerve. A *neuropsychosis* is a mental disorder which has its base in the nervous system.

Nitro, from the Greek *nitron*, denotes certain compounds of nitrogen. *Nitrobenzene* is produced the action of nitric acid on benzene.

Nocti means night. It comes from the Latin word *nox*. A *nocturn* is a pensive musical composition which deals with the night.

Nycti is from the Greek *nyx*. It also means night. *Nyctitropism* refers to sleeping positions assumed by certain plant leaflets at night.

Oculo comes from the Latin word *oculus* meaning eye. Anything that is *ocular* has a connection with the eye.

Odonto refers to the teeth. It is from the Greek *odon*. The *odontologist* is a scientist who deals with teeth.

Oleo is from the Latin word *oleum* meaning oil. The modern housewife is familiar with *oleomargarine*.

Omni comes from the Latin *omnis*. It denotes all. God is often said to be both *omnipontent* and *omnipresent*.

Omphalo is from the Greek *omphaloa*. It has to do with the navel.

Oto is from the Greek *otos*. It means ear. *Otology* is a science wich deals with the ear.

Oxy comes from the Greek *oxys*. It usually means acid. *Oxygen* forms a common example.

Paleo means old and is from the Greek term *palaios*. *Paleontology* is the science that deals with the life of past geological periods.

Pan is from the Greek *pan*. It usually denotes all. As an adjective used with the names of countries it specifies a union, as for example *Panhellenic*. In medicine it signifies a general affliction, as in *panplagia*.

Para is from the French. It refers to that which protects against. An example is *parasol*.

Pathy is from *penthos*, a Greek term meaning grief. It has to do with evanescent feelings and suffering. In *psychopathy*, it alludes to a disease.

Pedi, from the Latin *pes*, means foot. A Pedestrian is a foot traveler.

Pedo or *ped*, from the Greek *pais*, refers to a child. *Pediatrics* is a science which treats of the diseases of children.

Penta is from the Greek *pente*. It refers to five. A *pentagon*, for example, is a polygon with five angles or sides.

Phago is from the Greek *phagein* meaning to eat. One can readily see how the *esophagous* enters into this process.

Phane is derived from the Greek *phanein* meaning to appear. It refers to a substance appearing like. An example is *cellophane*.

Philo comes from the Greek *philos*, which means loving. A *philosopher* is a lover of sophistry.

Phony is from the Greek *phone*. It denotes sound. A *symphony* affords a melodious illustration.

Phore (phorus) is from the Greek, and means bearing. *Phosphorous* again affords an example, if it is regarded as inferring bearing light.

Phospho, from the Greek *phosphoros meaning light bringing, refers to the phosphorescent. Phosphorous* acid shines in the dark.

Photo comes from the Greek *phos*. It refers to light. *Photobiotic* is a biological term which makes reference to phenomena requiring light in which to live.

Phyllo is from the Greek *phyllon*. It means leaf. A common illustration is *phyllode*.

Phylo comes from the Greek *phylo*. It refers to race. *Phylogeny* treats of the race history of an animal or vegetable type.

Physio is from the Greek *physike*. It means nature. *Physiology* is a science which deals with living organisms.

Phyto comes from the Greek *phyton*. It means plant. Descriptive botany is called *phytography*.

Pneumato is from the Greek *pneumatikos*. It refers to air or respiration. *Pneumatology* has to do with the doctrine of spiritual beings.

Pneumono is from the Greek *pneumon*. It refers to the lung. In the treatment of tuberculosis, *pneumothorax 1is resorted to to collapse the lung.*

Poly is from the Greek *polya*. It denotes many. *Polyandry* refers to the possession by a woman of several husbands at one time.

Procto, having to do with the anus, comes from the Greek *proktus*. A *protectomy* involves surgery in the region of the rectum.

Pseudo, from the Greek *pseudes*, signifies deception. A *pseudonym* is a pen name.

Psycho has to do with the mind. It is derived from the Greek word *psyche* meaning soul. Phenomena that are *psychogenic* originate in the mind.

Pterous, from the Greek *pteron*, refers to wings. A *pterodactyl* is an extinct flying reptile.

Pyro means fire. It comes from the Greek *pyr*. A *pyromaniac* has impulses toward starting fires.

Quadr (quadri) comes from the Latin word *quattuor* meaning four. In chemistry *quadrivalent* refers to a textravalent.

Rheo is from the Greek *rheos*. It means current. A *rheotrope* is a device for reversing currents.

Scopy is from the Greek *shopein* meaning to view. One views minute objects through *micriscope*.

Sebi is from the Latin *sebiam*. It has to do with tallow. *Sebium* is secreted by the sebaceous glands.

Sex is from the Latin *sexus*. It refers to physiological distinctions. For example, we think of the male and female sexes.

Silico denotes the presence of silicon, next to oxygen the chief elementary constituent of the earth's crust.

Spectro, from *spectrum*, refers to radiant energy in a spectrum.

Spermo, from the Greek *sphen*, means wedge-shaped. A *sphenoid* pertains to a compound bone at the base of the cranium. It is wing shaped.

Sphere is from *sphaira*, a Greek word indicating a ball. In *atmosphere* we have a spherical surrounding layer.

Sphygmo is from the Greek *sphygmos*. It refers to pulse. A *sphygmomanometer* measures blood pressure.

Spiro comes from the Latin *spirare* meaning to breathe. A *spirometer* measures breathing.

Stamini comes from the Latin *stamen*. In botany this refers to the anther and the filament.

Strato comes from the Latin *stratus*. It has to do with spreading out. The meteoralogical term *stratus* is an example.

Stylo is from the Greek *stylos*. It means pillar. A *styloid* is a long slender process from the lower side of the temporal bone.

Tauto comes from the Greek *to auto* which means the same. *Tautology* refers to unnecessary repetition.

Taxis comes from the Greek *taxis*. It denotes arrangement. *Taxonomy* refers to animals, plants, and their classification.

Tel is from the Greek *tile* meaning afar. The telegraph is an apparatus which communicates at a distance.

Terato is from *teras*, the Greek for monster. *Teratology* is a medical term which refers to the consideration of manformations.

Tetra, meaning four, is from the Greek *tessares*. A *tetrachord* is a diatonic series of four chords.

Theo is from the Greek *theos*. It refers to God. *Theology* refers to religious knowledge.

Thermo, from the Greek *therme*, means heat. *Thermodynamics* has to do with the science which treats of the mechanical action or relations of heat.

Thio means sulphur and is from the Greek *theion*. *Thionic* is an adjective which refers to sulphur.

Tomy is from the Greek *tome* meaning a cutting. An *apendectomy* is the cutting out of the appendix.

Trachy, from the Greek *trachys*, means rough. A *trachyte* is a volcanic rock.

Tri, from the Latin *tri* or *tres*, means three. A tricycle is a vehicle containing three wheels.

Trope comes from the Greek *tropos*. It is equivalent to a turn. A *tropism* refers to the innate tendency of an organism to turn.

Uni, from the Latin *unus*, means one. The term *unicellular* refers to a single cell.

Urgy, from the Greek *ourgia*, refers to a technical art. *Metallurgy* is a common example.

urino comes from the Latin *urina*. This term is equivalent to *uro* from the Greek *uron*. It denotes urine.

Uter or *utero* comes from the Latin *uterus* for womb or belly. The adjective *uterine* makes reference to being born of the same mother.

Vagino is from the Latin *vagina*. It refers to virginal or the vagina. *Vaginitis* signifies an inflamation of this part of the female.